

ENVIRONMENTAL PROTECTION AGENCY

REGION III

FINAL CONSTRUCTION INSPECTION REPORT

Grantee Hamilton Township Municipal Authority Grant No. C-420916-01

Inspection James A. Smith, Jr., P.E., Chambersburg Area
Performed by: Office, Corps of Engineers Date 6 May 1981

Previous
Inspection by: James A. Smith, Jr., P.E. Date 20 January 1981

The following persons took part in the inspection:

Name	Title/Employer	Telephone No.
Bill Arrowood, President,	Arrowood, Inc.	(215) 263-8794
Dennis Black, Engineer,	Arrowood, Inc.	(215) 263-8794
Al Dalberto, Project Engineer,	PennDER-Harrisburg Regional Ofc	(717) 787-9665
George Geralis, Manager,	Hamilton Twp. Municipal Authority	(717) 264-8959

Description of Project: Construction of approximately 127,550 l.f. of 8" thru 14" gravity sewers, 30,365 l.f. of 4" thru 8" force main, five pumping stations, and appurtenances.

Contract No.	Approved Completion Date	Actual Completion Date	Substantial Completion Date	Liquidated Damages Assessed	
				Yes	No
Alternate No. 1	14 Oct 80	13 Nov 80	8 Oct 80		X
5	13 Jul 80	*	21 Oct 80		X

Project Completion:

1. a. Is construction complete? Yes x No Comments: Contract Alt. No. 1 - GERL - Complete - No Retainage. Contract No. 5 (P.S.) - Conewago - Punch List Items, Retainage \$12,000

b. Cut-off Date Not Established

2. Does the construction, in general appear to be satisfactory? Yes X No

Comments: All construction in accordance with approved plans, specifications, and contract modifications.

3. Are the items which were constructed now in full operation on a routine basis?

Yes X No Comments: System is in full operation and functioning satisfactorily.

4. Are there any conflicts between the approved and constructed facilities?

Yes No X Comments:

5. Have all punch list items been corrected? Yes No X If No, are retainages

being held pending correction? \$12,000 withheld on Contract 5 for completion of punch list items. See Attachment No. 1.

6. Is site restoration complete? Yes X No Comments:

7. Have all complaints from property owners been satisfied? Yes x No

Comments: All complaints filed during the construction period have been satisfied.

Two have been received under the warranty period and action is being taken to resolve same.

Operation and Maintenance:

8. Does the wastewater treatment plant have an NPDES Permit? Yes No

Permit No. N/A - SEWERS ONLY

Comments:

9. a. Is operation and maintenance of the facilities satisfactory and in conformance with the NPDES requirements? (Attach EPA Form 7500-5, Plant Performance)

Yes No Comments: NOT APPLICABLE

b. Has the operator provided evidence that applicable discharge monitoring reports are being submitted. Comments: NOT APPLICABLE

- Authority Office?
10. Is the Operation and Maintenance Manual at the Plant? Yes X No EPA Approved
16 Apr 81.
Is the Operation and Maintenance Manual being used by plant personnel? Yes X No
11. a. Are laboratory records complete and adequate? Yes No See EPA Form 7500-5
b. Appearance of plant effluent: NOT APPLICABLE

12. Operator's opinion about the constructed facilities? Operator satisfied with
constructed facilities.

13. Operation and Maintenance personnel and qualifications: O&M Manual - Manager,
clerk-typist, two skilled field mechanics. Actual Staff - Manager, clerk-typist,
superintendent, trainee mechanic.

Comments in General:

14. Are there odors coming from the ~~Plant~~ ^{Pump Stations?} Yes No X Comments

15. Is there a plant by-pass? Yes No Approved by:
Describe: NOT APPLICABLE

Construction Records:

16. a. Are construction records adequate? Yes X No Comments:

b. Have all change orders been completed and submitted to the State Agency?
Yes No X Comments: All change orders have been submitted except for final as-
built Change Orders No. 23 and 24.

16. c. Daily Logs? Yes ☒ No ☐ Comments: _____

Material Tests? Yes ☒ No ☐ Comments:

d. Equipment Guarantees? Yes ☒ No ☐ Comments:

As-Built Plans? Yes ☒ No ☐ Comments:

However, changes in electrical wiring and additional copies to be sent to Hamilton Township Municipal Authority

17. Construction records are to be kept at Arrowood, Inc.'s Main Office.

18. List special major tests noted in the specifications and indicate whether
adequately recorded. Satisfactorily
Recorded

Trench Backfill Compaction Tests (90% Minimum)	X
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Structural Concrete Compaction Strength Tests (3,000 psi minimum)	X
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Gravity Sewers - Low Pressure Air Test X

Force Mains - Hydrostatic Leakage Test (150 psi minimum)	X
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Manholes - Infiltration/Exfiltration Test	X
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19. Are test results for material and equipment available upon request?

Yes ☒ No ☐ Comments: _____

20. Were leakage tests performed on ~~wastewater treatment tank units?~~ pump station wet wells? Yes ☒ No

Comments: Tested during preliminary start-up.

Safety Features:

21. Are safety features adequate (first aid equipment, handrails, ladders, chlorination ventilation, gas masks, housekeeping, etc.)? Yes, all received and in use, except for disconnects on air packs, which render them inoperative. Conewago to supply these under punch list.

22. Are backflow devices provided at all connections to city water supply?

Yes___ No X Comments: No public water supplies used. Pump stations supplied by wells.

23. Have all process piping and potable water piping been color coded and identified as required by contract specifications? Yes X No Comments: Piping properly color coded at pump stations.

24. Are nonpotable water spigots labeled "not for drinking"? Yes No X

Comments: No permanent outlets at pump stations, wells are capped and portable pump used when water is needed.

General:

25. Is there an alternate power source? Yes X No Comments: Emergency generator at each pump station.

Is it functioning adequately? Yes X No Comments: Units at each station were tested.

Can a power failure be simulated? Yes X No Comments: All units functioned normally.

26. Is miscellaneous equipment on hand as required to be furnished under the contract(s) such as laboratory equipment, chemicals, tools, and spare parts?

Yes X No Comments: All furnished as specified.

27. Is all sewer system metering equipment operational? Yes X No Comments:

28. The following items should be completed before construction can be considered complete and acceptable for final payment:

a. Submission of final as-built change orders to DER.

b. Completion of punch list items and final payment to contractor on Contract 5 - Pumping Stations. (Attachment No. 1)

c. Submission of revised as-built drawings to Authority.

Narrative: (Provide explanation for deficiencies or inadequacies with a recommendation for EPA action)

1. The inspection was conducted at the site and Authority Offices with representatives of the Grantee, DER, and the Consultant in attendance.

Arrowood, Inc. was responsible for project design and construction management.

2. Construction is complete, except for remaining punch list items on Contract 5, and the system has been in operation since October 1980. During heavy rains in April 1981 the Consultant reinspected all manholes and identified sources of suspected I/I. (Attachment No. 2). The Consultant reported that satisfactory repairs were effected and the listed leaks were eliminated.

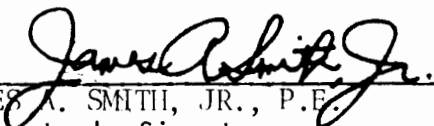
3. Warranty items being corrected on Contract 1 at this time are:

a. Insertion of clay dikes along interceptor line near Pump Station No. 5 to prevent loss of stream water along trench.

b. Resolution of damage claim at automobile lot at US 30 and Crottletown Road.

4. All Special Grant Conditions, including approval of ICR, UCS, SUO, and O&M, have been satisfied. Safety features of the system are adequate.

5. The project cut-off date will be established upon completion of deficiencies listed under Item No. 28 and submission of the final grant payment request package.


JAMES A. SMITH, JR., P.E.
Inspector's Signature
Chambersburg Area Office
Philadelphia Project Office
Corps of Engineers

12 May 1981

Date

18 AUG 1981

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III - 6th & Walnut Sts.
Philadelphia, Pa. 19106

SUBJECT: Approval of Compliance Reports

DATE: January 31, 1977

FROM: Grants Administration Branch, *RJP* (3WP40)
Water Programs Division

TO: Civil Rights & Urban Affairs Division (3CR00)

Attached are Compliance Reports (EPA Form 4700-4) for your approval:

Project Number

Applicant

C-240504-01

Washington Suburban Sanitary Commission

C-240506-01

Washington Suburban Sanitary Commission

C-240539-01

Harford County, Maryland

C-240572-01

Washington Suburban Sanitary Commission

C-420666-02

Delaware County Regional Water Quality
Control Authority

C-420914-01

Borough of Chambersburg, Pennsylvania

C-420916-01

Hamilton Township Municipal Authority, Pa.

C-540278-02

Town of Fort Gay, West Virginia

FROM: Civil Rights & Urban Affairs Division (3CR00)

TO: Grants Administration Branch, (3WP40)
Water Programs Division

The above items are approved with the exception of those listed below:

10 25 DEC 1977

[Signature]

2/7/77
(Date)

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